


SERIES: CMS-2008-018X | **DESCRIPTION:** SPEAKER

FEATURES

- 280 Hz resonant frequency
- ideal for headsets
- multiple termination options


SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
input power	test at EQ voltage		0.10	0.15	W
impedance	test at EQ voltage, 2 kHz	6.8	8.0	9.2	Ω
resonant frequency (Fo)	test at EQ voltage	224	280	336	Hz
frequency response		Fo		20,000	Hz
sound pressure level	test at EQ voltage, 2 kHz, 5 cm, baffle	87	90	93	dB
distortion	see THD curve				
buzz, rattle, etc.	must be normal at EQ voltage, sine wave between 0.1-3.4 kHz				
polarity	cone moves forward w/ positive dc current to "+" terminal				
dimensions	20 x 8 x 3				mm
magnet	Nd-Fe-B				
frame material	PPA				
cone material	TPU				
weight			1.5		g
operating temperature		-20		65	$^{\circ}\text{C}$
storage temperature		-30		70	$^{\circ}\text{C}$
hand soldering	for 1-2 seconds	370	380	390	$^{\circ}\text{C}$
RoHS	yes				

Notes: 1. All specifications measured at 15-35 $^{\circ}\text{C}$, humidity at 45-85%, under 86-106 kPa pressure, unless otherwise noted.

PART NUMBER KEY
CMS - 2008 - 018 X

Base Number

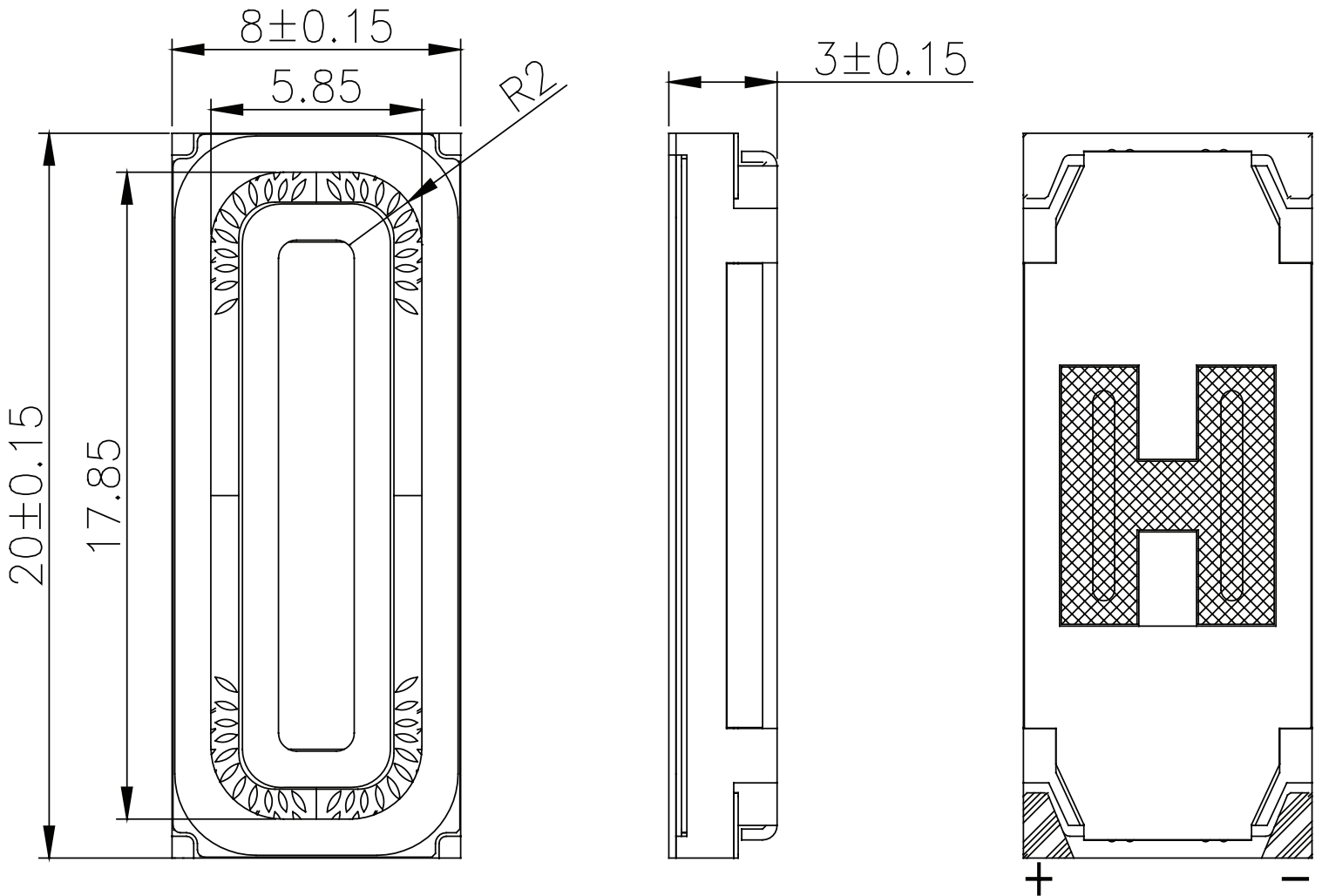
 Termination Options:
 SP = solder pads
 L200 = 200 mm wire leads

EQ VOLTAGE

Frequency,Hz	Voltage,V	Frequency,Hz	Voltage,V	Frequency,Hz	Voltage,V	Frequency,Hz	Voltage,V
50	0.42	236	0.61	1120	0.9	5300	0.9
53	0.42	250	0.65	1180	0.9	5600	0.9
56	0.42	265	0.68	1250	0.9	6000	0.9
60	0.42	280	0.7	1320	0.9	6300	0.9
63	0.42	300	0.72	1400	0.9	6700	0.9
67	0.41	315	0.73	1500	0.9	7100	0.9
71	0.41	335	0.74	1600	0.9	7500	0.9
75	0.41	355	0.75	1700	0.9	8000	0.9
80	0.41	375	0.76	1800	0.9	8500	0.9
85	0.41	400	0.79	1900	0.9	9000	0.9
90	0.4	425	0.82	2000	0.9	9500	0.9
95	0.4	450	0.86	2120	0.9	10000	0.9
100	0.4	475	0.9	2240	0.9	10600	0.9
106	0.41	500	0.9	2360	0.9	11200	0.9
112	0.41	530	0.9	2500	0.9	11800	0.9
118	0.41	560	0.9	2650	0.9	12500	0.9
125	0.41	600	0.9	2800	0.9	13200	0.9
132	0.41	630	0.9	3000	0.9	14000	0.9
140	0.41	670	0.9	3150	0.9	15000	0.9
150	0.42	710	0.9	3350	0.9	16000	0.9
160	0.43	750	0.9	3550	0.9	17000	0.9
170	0.45	800	0.9	3750	0.9	18000	0.9
180	0.46	850	0.9	4000	0.9	19000	0.9
190	0.48	900	0.9	4250	0.9	20000	0.9
200	0.5	950	0.9	4500	0.9		
212	0.53	1000	0.9	4750	0.9		
224	0.57	1060	0.9	5000	0.9		

MECHANICAL DRAWING (SOLDER PAD)

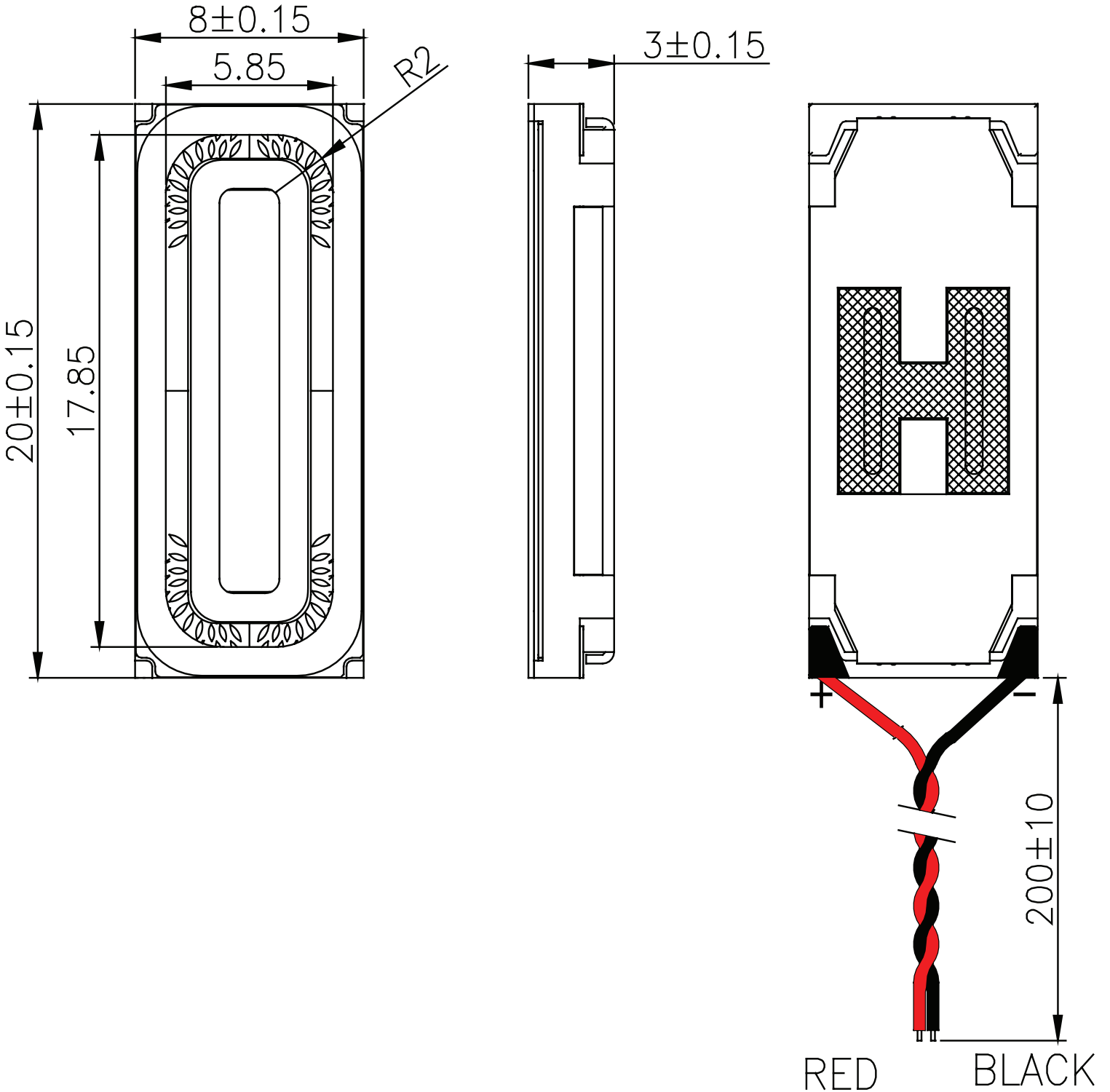
units: mm
tolerance: ± 0.2 mm



MECHANICAL DRAWING (WIRE LEADS)

units: mm
tolerance: ± 0.2 mm

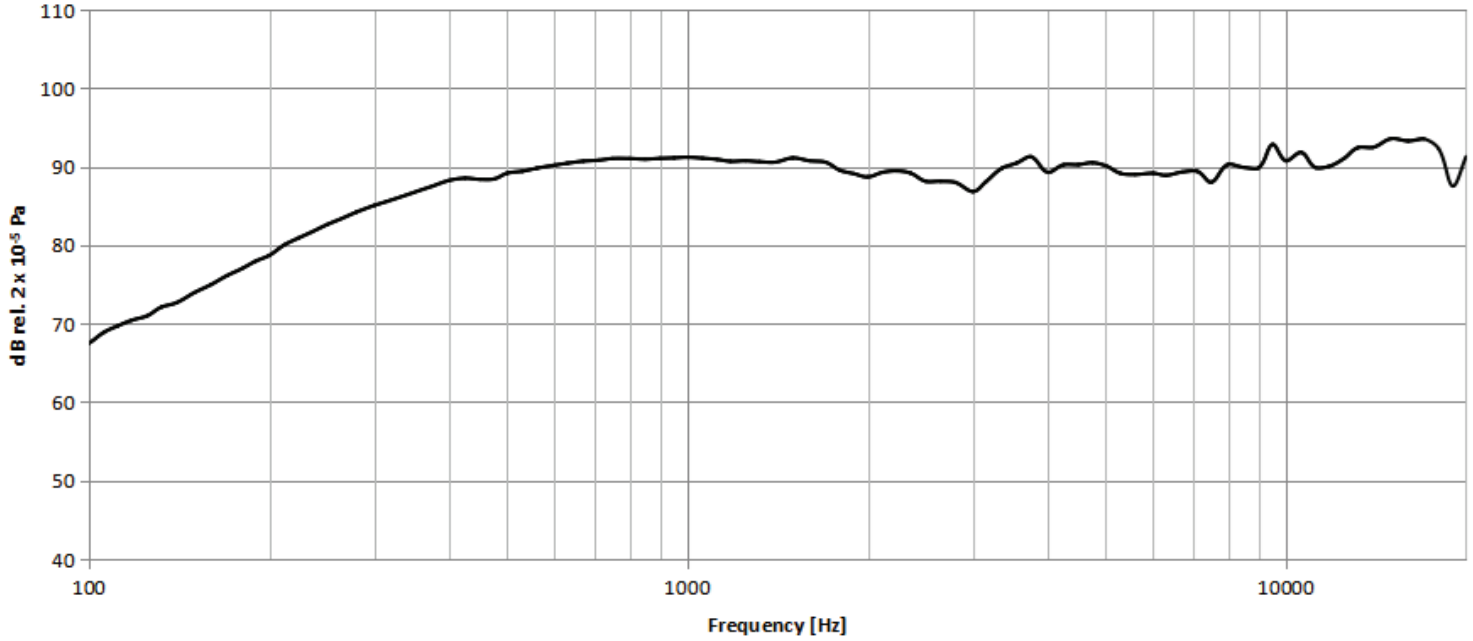
wire: UL1571 32 AWG



RESPONSE CURVES

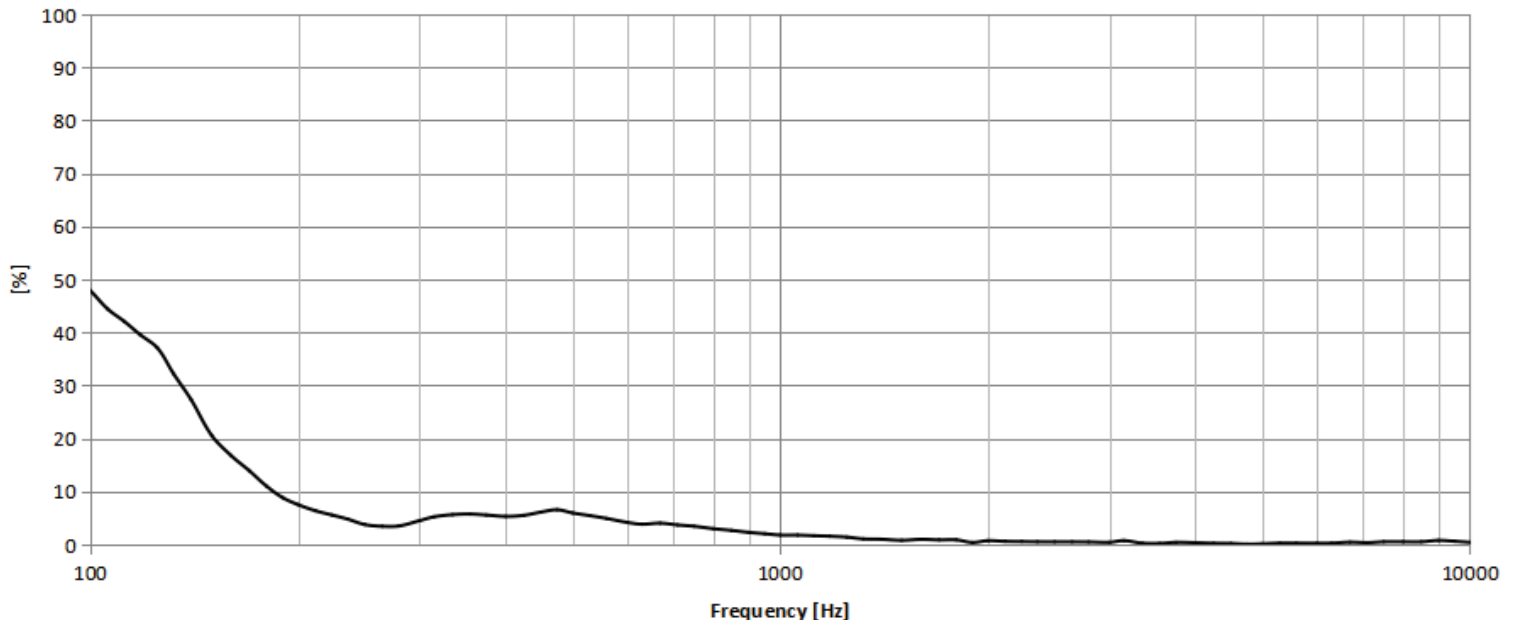
Frequency Response Curve

Test Conditions: EO voltage/5 cm/baffle



Total Harmonic Distortion Curve

Test Conditions: EQ voltage/5 cm/baffle



THIELE-SMALL PARAMETERS

parameter	conditions/description	typ
Mechanical Q Factor	Qms	1.821
Electrical Q Factor	Qes	1.852
Total Q Factor	Qts	0.918
Compliance Equivalent Volume	Vas	0.0091

Notes: 2. Results represent typical performance in Free Air conditions.

REVISION HISTORY

rev.	description	date
1.0	initial release	04/21/2026

The revision history provided is for informational purposes only and is believed to be accurate.



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